Amendments to the Specification

Please replace the abstract with the following amended abstract:

The present invention provides a system and method for encapsulating protocols across a switching fabric network. Packets, which may utilize any underlying protocol, are encapsulated with a route header. This route header contains path routing, traffic and packet size information. A novel path routing scheme is used to route packets across the fabric, where the fabric has a plurality of switches, each having a plurality of ports. Each switch uses only data from within the packet and its own port count to determine the appropriate output port. There is no need to node or address lookup mechanisms in the switches.